



DEPARTMENT OF PERMITTING, ENVIRONMENT, AND REGULATORY
AFFAIRS (PERA)
BOARD AND CODE ADMINISTRATION DIVISION

NOTICE OF ACCEPTANCE (NOA)

MIAMI-DADE COUNTY
PRODUCT CONTROL SECTION
11805 SW 26 Street, Room 208
Miami, Florida 33175-2474
T (786) 315-2590 F (786) 315-2599

www.miamidade.gov/pera

Sol-A-Trol Aluminum Products, Inc.

4101 NW 132nd Street

Opa Locka, FL 33054

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County PERA - Product Control Section to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. PERA reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the Florida Building Code, including the High Velocity Hurricane Zone.

DESCRIPTION: Series "535" Aluminum Single Hung Window – L.M.I.

APPROVAL DOCUMENT: Drawing No. **535SH**, titled "Series 535 Aluminum Single Hung Window. (L.M.I.)", sheets 1 through 9 of 9, dated 01/30/12, with revision #2 dated 06/27/12, prepared by Stanton Engineering, Inc. Structural Engineering Services, signed and sealed by Christopher Stanton, P.E., bearing the Miami-Dade County Product Control Revision stamp with the Notice of Acceptance number and expiration date by the Miami-Dade County Product Control Section.

MISSILE IMPACT RATING: Large and Small Missile Impact Resistant

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state, model/series, and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA **revises and renews** NOA # **06-0911.02** and consists of this page 1 and evidence pages E-1, E-2, E-3 and E-4, as well as approval document mentioned above.

The submitted documentation was reviewed by **Manuel Perez, P.E.**



MP
7/7/12

NOA No. 12-0305.02
Expiration Date: March 15, 2017
Approval Date: July 19, 2012
Page 1

Sol-A-Trol Aluminum Products, Inc.


NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS

1. Manufacturer's die drawings and sections.
2. Drawing No **535SH**, Sheets 1 through 9 of 9, titled "Series 535 Aluminum Single Hung Window (L.M.I.)", dated 01/30/12, with revision #2 dated 06/27/12, prepared by Stanton Engineering, Inc. Structural Engineering Services, signed and sealed by Christopher Stanton, P.E.

B. TESTS

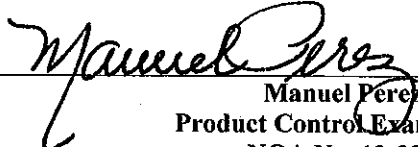
1. Test reports on: 1) Air Infiltration Test,
2) Uniform Static Air Pressure Test,
3) Water Resistance Test,
4) Forced Entry Test, per SFBC 3603.2 (b)
along with marked-up drawings and installation diagram of a single hung window, glazed with 7/16" ann. laminated glass, prepared by Hurricane Engineering and Testing Laboratory, Inc., Test Report No. **HETI-10-3029**, dated 05/13/10, signed and sealed by Candido F. Font, P.E.
2. Test reports on: 1) Large Missile Impact Test per FBC, TAS 201-94
2) Cyclic Wind Pressure Loading per FBC, TAS 203-94
along with marked-up drawings and installation diagram of a single hung window, glazed with 7/16" ann. laminated glass prepared by Hurricane Engineering and Testing Laboratory, Inc., Test Report No. **HETI-10-3030**, dated 05/13/10, signed and sealed by Candido F. Font, P.E.
3. Test reports on: 1) Air Infiltration Test,
2) Uniform Static Air Pressure Test,
3) Water Resistance Test,
4) Forced Entry Test, per SFBC 3603.2 (b)
along with marked-up drawings and installation diagram of a single hung window, glazed with 1-1/16" laminated/insulated glass, prepared by Hurricane Engineering and Testing Laboratory, Inc., Test Report No. **HETI-10-3098**, dated 09/10/10, signed and sealed by Candido F. Font, P.E.
4. Test reports on: 1) Large Missile Impact Test per FBC, TAS 201-94
2) Cyclic Wind Pressure Loading per FBC, TAS 203-94
along with marked-up drawings and installation diagram of a single hung window, glazed with 1-1/16" laminated/insulated glass prepared by Hurricane Engineering and Testing Laboratory, Inc., Test Report No. **HETI-10-3099**, dated 09/10/10, signed and sealed by Candido F. Font, P.E.


Manuel Perez, P.E.
Product Control Examiner
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B. TESTS (CONTINUED)

5. Test reports on: 1) Air Infiltration Test,
2) Uniform Static Air Pressure Test,
3) Water Resistance Test,
4) Forced Entry Test, per SFBC 3603.2 (b)
along with marked-up drawings and installation diagram of a full view single hung window, glazed with 1-1/16" laminated/insulated glass, prepared by Hurricane Engineering and Testing Laboratory, Inc., Test Report No. **HETI-10-3100**, dated 09/10/10, signed and sealed by Candido F. Font, P.E.
6. Test reports on: 1) Large Missile Impact Test per FBC, TAS 201-94
2) Cyclic Wind Pressure Loading per FBC, TAS 203-94
along with marked-up drawings and installation diagram of a full view single hung window, glazed with 1-1/16" laminated/insulated glass prepared by Hurricane Engineering and Testing Laboratory, Inc., Test Report No. **HETI-10-3101**, dated 09/10/10, signed and sealed by Candido F. Font, P.E.
7. Test reports on: 1) Air Infiltration Test,
2) Uniform Static Air Pressure Test,
3) Water Resistance Test,
4) Forced Entry Test, per SFBC 3603.2 (b)
along with marked-up drawings and installation diagram of a mulled single hung and fixed window, glazed with 21/64" and 5/16" HS. glass, prepared by Hurricane Engineering and Testing Laboratory, Inc., Test Report No. **HETI-04-1398**, dated 07/22/04, signed and sealed by Ivonne Ghia, P.E.
(Submitted under previous NOA#06-0911.02)
8. Test reports on: 1) Large Missile Impact Test per FBC, TAS 201-94
2) Cyclic Wind Pressure Loading per FBC, TAS 203-94
along with marked-up drawings and installation diagram of a mulled single hung and fixed window, glazed with 5/16" and 7/16" HS laminated glass, prepared by Hurricane Engineering and Testing Laboratory, Inc., Test Report No. **HETI-05-1912**, dated 12/21/05, signed and sealed by Gilbert Diamond, P.E.
(Submitted under previous NOA#06-0911.02)
9. Test reports on: 1) Air Infiltration Test,
2) Uniform Static Air Pressure Test,
3) Water Resistance Test,
4) Forced Entry Test, per SFBC 3603.2 (b)
along with marked-up drawings and installation diagram of a mulled single hung and fixed window, glazed with 7/16" ANN. glass, prepared by Hurricane Engineering and Testing Laboratory, Inc., Test Report No. **HETI-05-1460**, dated 08/05/05, signed and sealed by Ivonne Ghia, P.E.
(Submitted under previous NOA#06-0911.02)


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B. TESTS (CONTINUED)

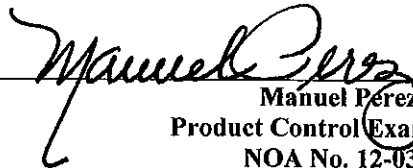
10. Test reports on: 1) Large Missile Impact Test per FBC, TAS 201-94
2) Cyclic Wind Pressure Loading per FBC, TAS 203-94
along with marked-up drawings and installation diagram of a mulled single hung and fixed window, glazed with 7/16" ANN. laminated glass, prepared by Hurricane Engineering and Testing Laboratory, Inc., Test Report No. **HETI-05-2056**, dated 12/14/05, signed and sealed by Ivonne Ghia, P.E.
(Submitted under previous NOA#06-0911.02)
11. Test reports on: 1) Large Missile Impact Test per FBC, TAS 201-94
2) Cyclic Wind Pressure Loading per FBC, TAS 203-94
along with marked-up drawings and installation diagram of a mulled single hung and fixed window, glazed with 7/16" ANN. laminated glass, prepared by Hurricane Engineering and Testing Laboratory, Inc., Test Report No. **HETI-05-1966**, dated 11/14/05, signed and sealed by Ivonne Ghia, P.E.
(Submitted under previous NOA#06-0911.02)
12. Test reports on: 1) Large Missile Impact Test per FBC, TAS 201-94
2) Cyclic Wind Pressure Loading per FBC, TAS 203-94
along with marked-up drawings and installation diagram of two mulled single hung windows, glazed with 7/16" HS laminated glass, prepared by Hurricane Engineering and Testing Laboratory, Inc., Test Report No. **HETI-06-2095**, dated 05/02/06, signed and sealed by Ivonne Ghia, P.E.
(Submitted under previous NOA#06-0911.02)

C. CALCULATIONS

1. Anchor verification calculations and structural analysis, complying with FBC-2010, dated 01/30/12, and 06/07/12, prepared by Stanton Engineering, Inc., signed and sealed by Christopher Stanton, P.E.
2. Glazing complies with ASTM E1300-04

D. QUALITY ASSURANCE

1. Miami-Dade Department of Permitting, Environment, and Regulatory Affairs (PERA)


Manuel Perez, P.E.
Product Control Examiner
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E. MATERIAL CERTIFICATIONS


1. Notice of Acceptance No. **11-0624.02** issued to **E.I. DuPont DeNemours & Co., Inc.** for their "**DuPont SentryGlas® Interlayer**" dated 08/25/11, expiring on 01/14/17.
2. Notice of Acceptance No. **11-0624.01** issued to **E.I. DuPont DeNemours & Co., Inc.** for their "**DuPont Butacite® PVB Interlayer**" dated 09/08/11, expiring on 12/11/16.
3. Notice of Acceptance No. **08-1224.04** issued to **Solutia, Inc.** for their "**Saflex Composites Glass Interlayer with PET Core**" dated 02/25/09, expiring on 12/11/13.
4. Notice of Acceptance No. **11-0325.05** issued to **Solutia, Inc.** for their "**Saflex and Vanceva clear and color interlayers**" dated 05/05/11, expiring on 05/21/16.

F. STATEMENTS

1. Statement letter of conformance, complying with FBC-2007 and FBC-2010, dated January 30, 2012, signed and sealed by Christopher Stanton, P.E.
2. Statement letter of no financial interest, dated January 23, 2012, signed and sealed by Christopher Stanton, P.E.

G. OTHER

1. Notice of Acceptance No. **06-0911.02**, issued to Arso Enterprises dba Sol-A-Trol Aluminum Products for their Series 535 Aluminum Single Hung Window – L.M.I., approved on 03/15/07 and expiring on 03/15/12.


Manuel Perez, P.E.
Product Control Examiner
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NOTE:

(1) ANCHOR REQUIRED EACH SIDE OF MEETING RAIL.
FOR ANCHOR TYPES 1, 2 & 6 WHERE D.P. EXCEEDS +/-56.0 PSF, INSTALL (2) ANCHORS EACH SIDE OF MEETING RAIL.

THESE WINDOWS ARE RATED FOR LARGE MISSILE IMPACT. SHUTTERS ARE NOT REQUIRED.

SERIES 535 ALUMINUM SINGLE HUNG WDW.

DESIGN LOAD RATING FOR THESE WINDOWS TO BE AS PER CHARTS SHOWN ON SHEET 7 OF 9.

APPROVAL APPLIES TO SINGLE UNITS OR SIDE BY SIDE COMBINATIONS OF S.H./S.H. OR SINGLE HUNG WITH OTHER WINDOW TYPES IN MODULES OF TWO OR MORE WINDOWS USING MIAMI-DADE COUNTY APPROVED MULLIONS IN BETWEEN. LOWER DESIGN PRESSURE FROM WINDOWS OR MULLION APPROVAL WILL APPLY TO ENTIRE SYSTEM.

THIS PRODUCT HAS BEEN DESIGNED AND TESTED TO COMPLY WITH THE REQUIREMENTS OF THE FLORIDA BUILDING CODE 2007/2010 EDITION INCLUDING HIGH VELOCITY HURRICANE ZONE (HVHZ).

WOOD BUCKS, BY OTHERS, MUST BE ANCHORED PROPERLY TO TRANSFER LOADS TO THE STRUCTURE.

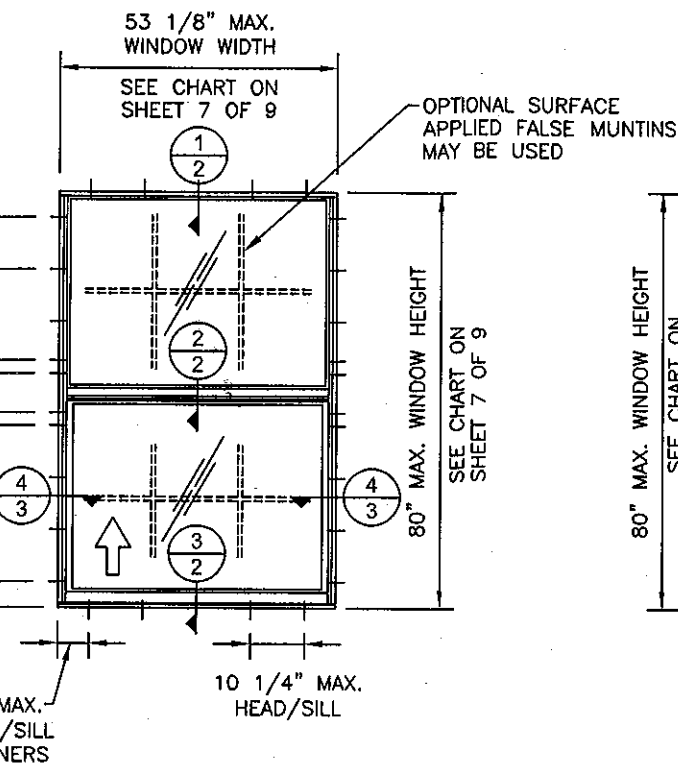
ANCHORS SHALL BE AS LISTED AND SPACED AS SHOWN ON DETAILS. ANCHOR EMBEDMENT INTO BASE MATERIAL SHALL BE BEYOND WALL DRESSING OR STUCCO.

ANCHORING OR LOADING CONDITIONS NOT SHOWN IN THESE DETAILS ARE NOT PART OF THIS APPROVAL.

A LOAD DURATION INCREASE IN ALLOWABLE STRESS WAS NOT USED IN DESIGN OF THIS SYSTEM.

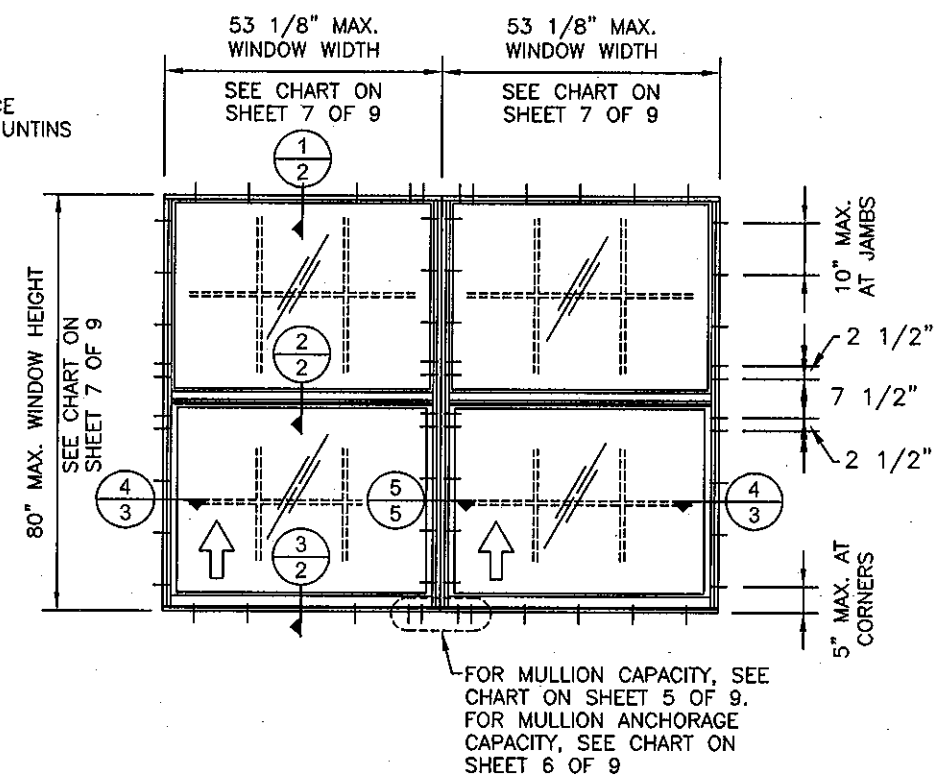
MATERIALS INCLUDING BUT NOT LIMITED TO STEEL SCREWS, THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS OF 2007/2010 FLORIDA BLDG. CODE

NO.	DATE	REVISIONS
1	5/30/12	PER ADD'L. TESTING / BCCO REVIEW
2	6/27/12	PER BCCO REVIEW
3		
4		
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**TYPICAL ELEVATION
SINGLE WINDOW (1/1)**

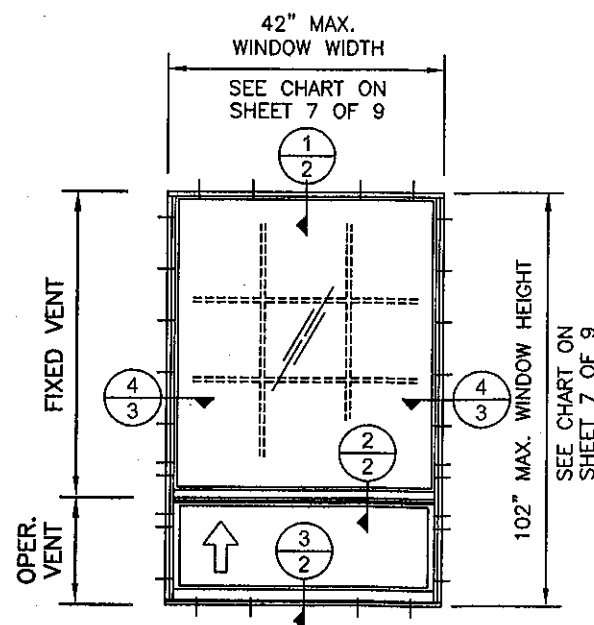
TESTED UNIT



**TYPICAL ELEVATION
MULTIPLE WINDOWS (1/1)**

TESTED UNIT

**LAMINATED GLASS
LARGE MISSILE IMPACT**



**TYPICAL FULL VIEW
SINGLE WINDOW (FULL VIEW)**

TESTED UNIT

SEE SINGLE HUNG WINDOW (1/1) ELEVATION FOR ANCHORAGE.

**MAX. FIXED VENT D.L.O. LIMITED TO 14.8 SQ. FT. GLASS TYPES "C" & "G" ONLY

MIAMI-DADE COUNTY USE ONLY

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as complying with the Florida Building Code
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Miami Dade Product Control

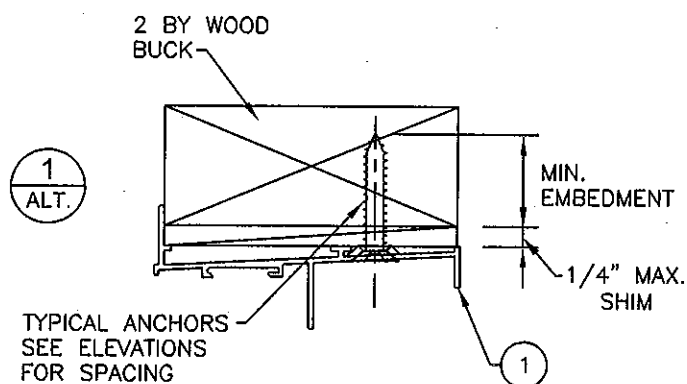
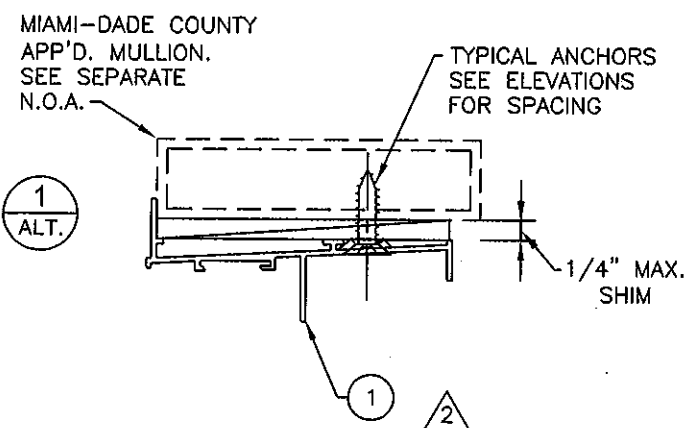
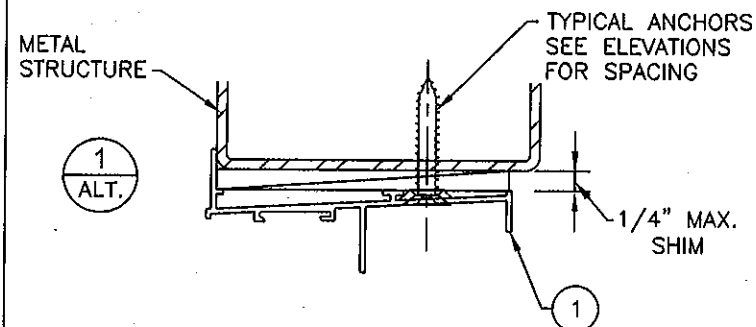
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CHECKED BY: C.S.

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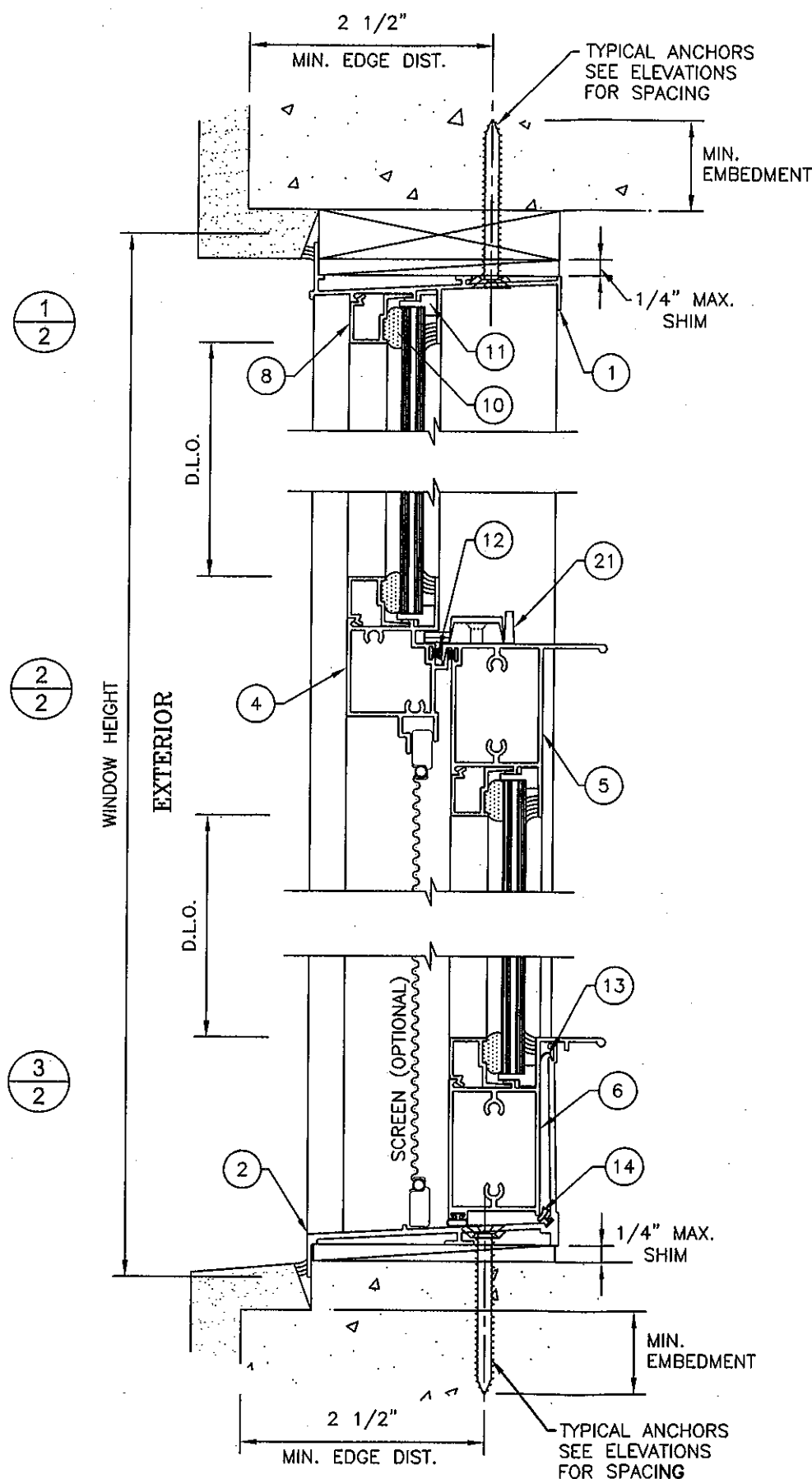
SHEET NO.
1 of 9

STANTON ENGINEERING, INC.
STRUCTURAL ENGINEERING SERVICES
2701 NW BOCA RATON BLVD, SUITE 115
BOCA RATON, FL 33431
TEL: (561) 393-1003 FAX: (561) 393-1008

SERIES 535 ALUMINUM SINGLE HUNG WINDOW (L.M.I.)
SOL-A-TROL
aluminum products, Inc.
4101 N.W. 132nd Street
Miami, Florida 33054
Phone: (305) 681-2020
Fax: (305) 681-2035



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WOOD BUCKS AND METAL STRUCTURE NOT BY SOL-A-TROL MUST SUPPORT LOADS IMPOSED BY GLAZING SYSTEM AND TRANSFER THEM TO THE BUILDING STRUCTURE.

TYPICAL ANCHORS:
SEE ELEVATIONS FOR SPACING

TYPE 1 - 1/4" TAPCONS

THRU 1BY WOOD BUCKS INTO 3000 PSI MIN. CONC. OR C-90 GROUT FILLED BLOCK. 1 1/4" MIN. EMBED. INTO CONC. OR MASONRY

DIRECTLY INTO 3000 PSI MIN. CONCRETE OR C-90 GROUT FILLED BLOCK. 1 1/4" MIN. EMBED. INTO CONC. OR MASONRY

TYPE 2 - 1/4" TAPCONS

INTO 2BY WOOD BUCKS OR WOOD SUBSTRATES 1 1/2" MIN. PENETRATION INTO #2 SYP (G=0.55)

TYPE 3 - #14 SMS (MIN. GRADE 2 CRS)
INTO METAL STRUCTURES

METAL STUDS: 16 GA. MIN.
STEEL: 1/8" THK. MIN. (Fy = 36 KSI MIN.)
ALUMINUM: 1/8" MIN. THK. (6063-T5 MIN.)
(STEEL IN CONTACT WITH ALUM. TO BE PLATED OR PAINTED)

TYPE 4 - 1/4" ELCO DRILL FLEX
INTO METAL STRUCTURES

METAL STUDS: 16 GA. MIN.
STEEL: 1/8" THK. MIN. (Fy = 36 KSI MIN.)
ALUMINUM: 1/8" MIN. THK. (6063-T5 MIN.)
(STEEL IN CONTACT WITH ALUM. TO BE PLATED OR PAINTED)

TYPE 5 - #12 SMS (MIN. GRADE 2 CRS)
INTO APPROVED MULLIONS (1/8" MIN. THK.)
1/4" MAX. SHIM SPACE

TYPE 6 - #14 WOOD SCREWS

INTO 2BY WOOD BUCKS OR WOOD SUBSTRATES 1 3/8" MIN. PENETRATION INTO #2 SYP (G=0.55)

TYPICAL EDGE DISTANCE

INTO CONC. OR MASONRY = 1 1/2" MIN.
INTO WOOD STRUCTURE = 1" MIN.
INTO METAL STRUCTURE = 1/2" MIN.

SEALANTS:

ALL FRAME AND VENT CORNERS SEALED WITH SCHNEE MOREHEAD SEAM SEALER.

MIAMI-DADE COUNTY USE ONLY

PRODUCT REVISED
as complying with the Florida
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Acceptance No. 12-0305.02
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By *Manuel Perez*
Miami Dade Product Control

SERIES 535 ALUMINUM SINGLE HUNG WINDOW (L.M.I.)

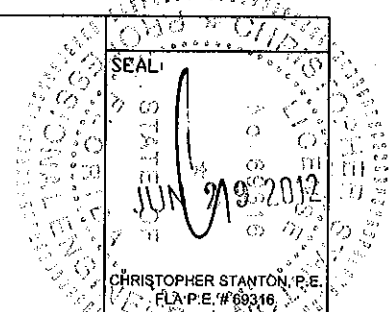
SOL-A-TROL
aluminum products, Inc.
4101 N.W. 132nd Street
Miami, Florida 33054
Phone: (305) 681-2020
Fax: (305) 681-2035

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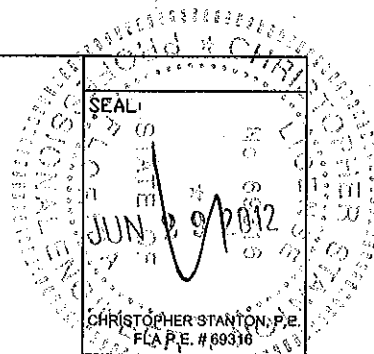
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2 of 9



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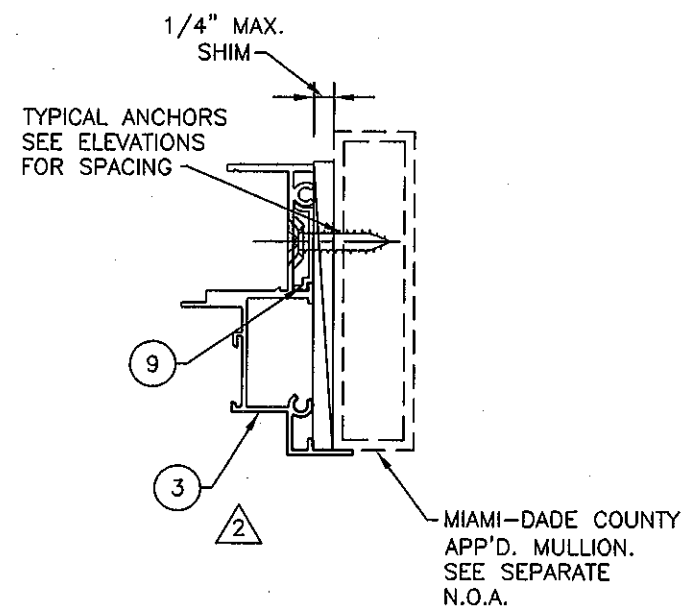
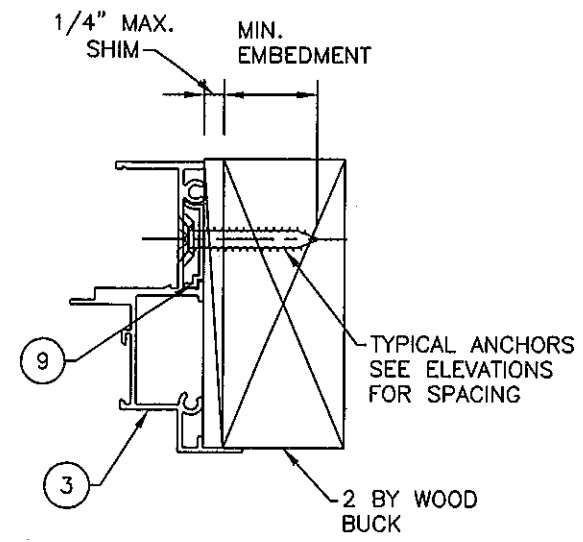
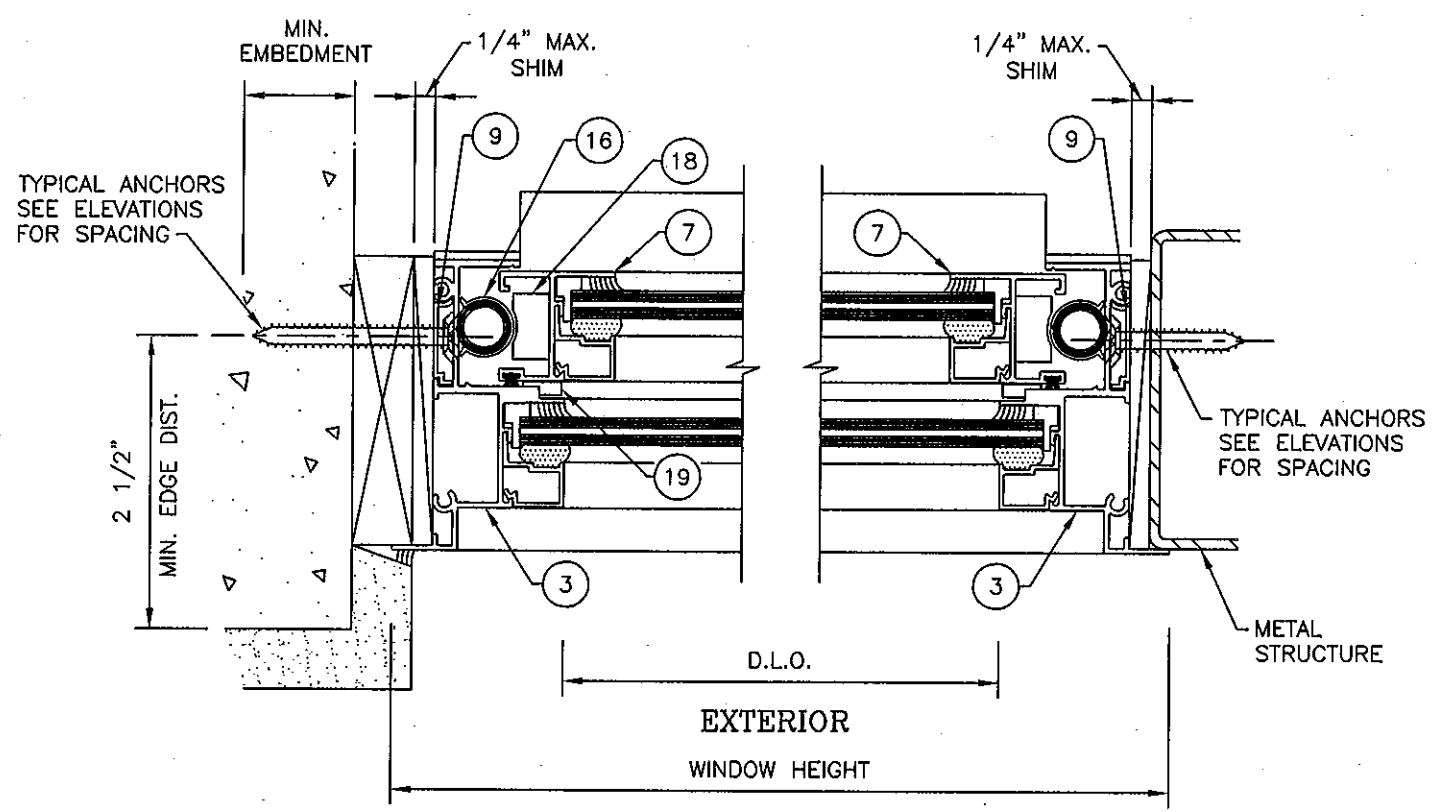
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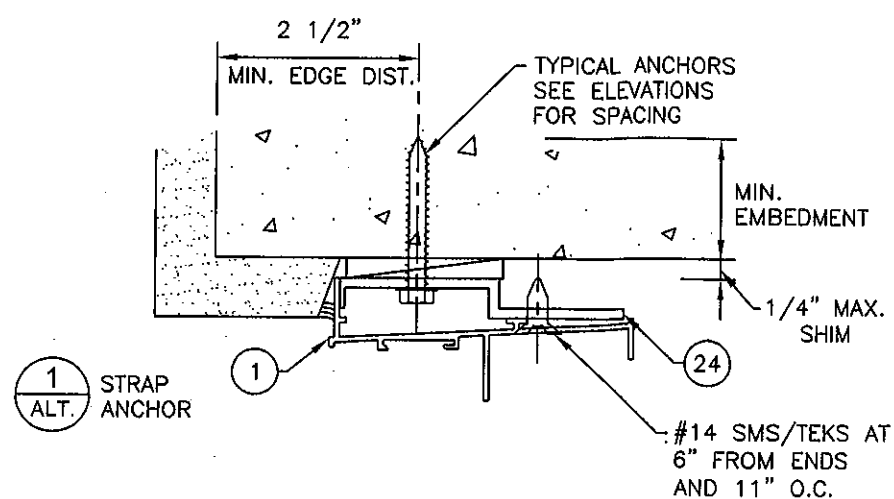
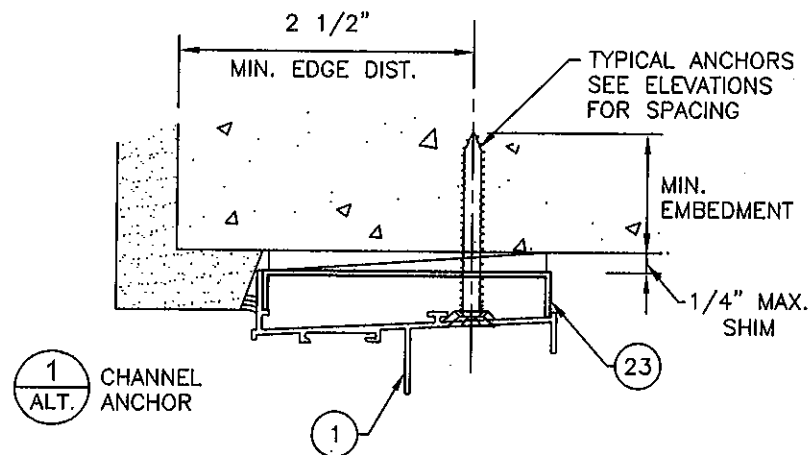
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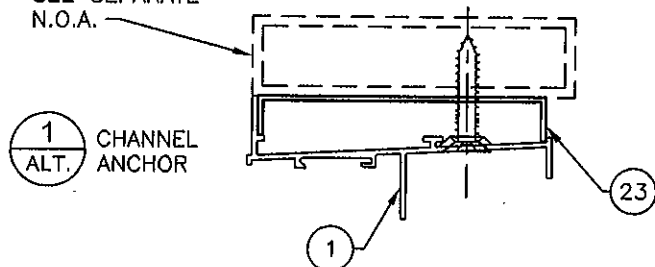
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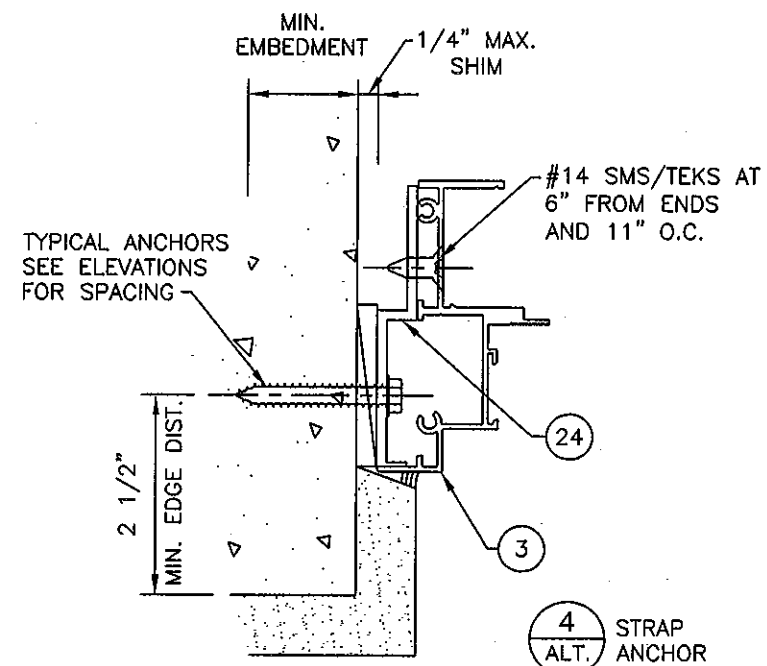
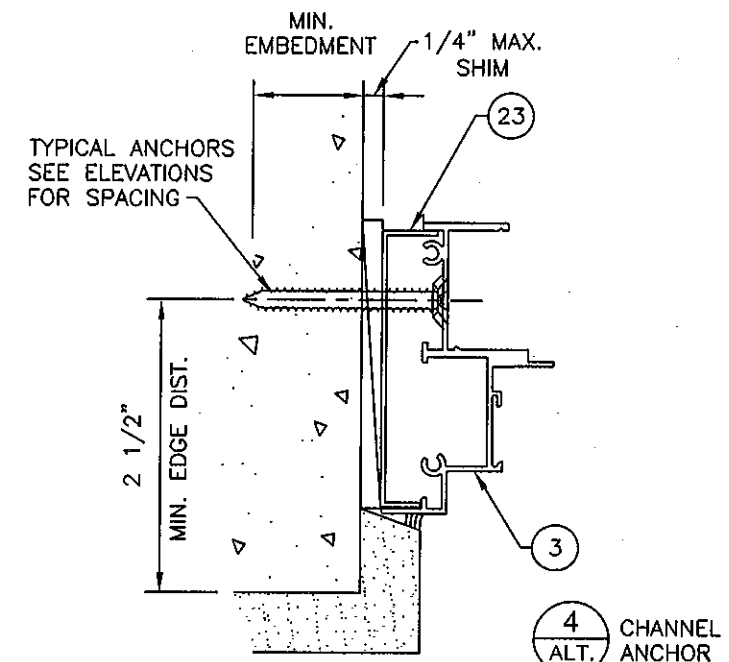
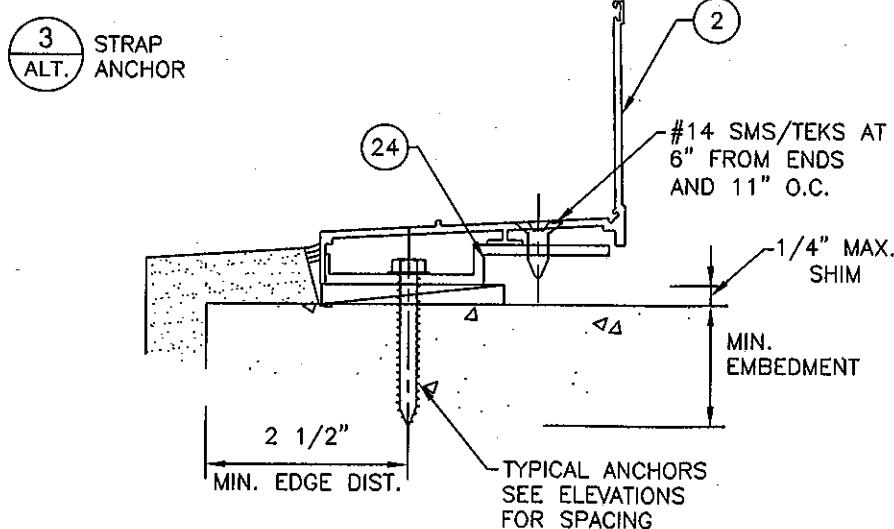
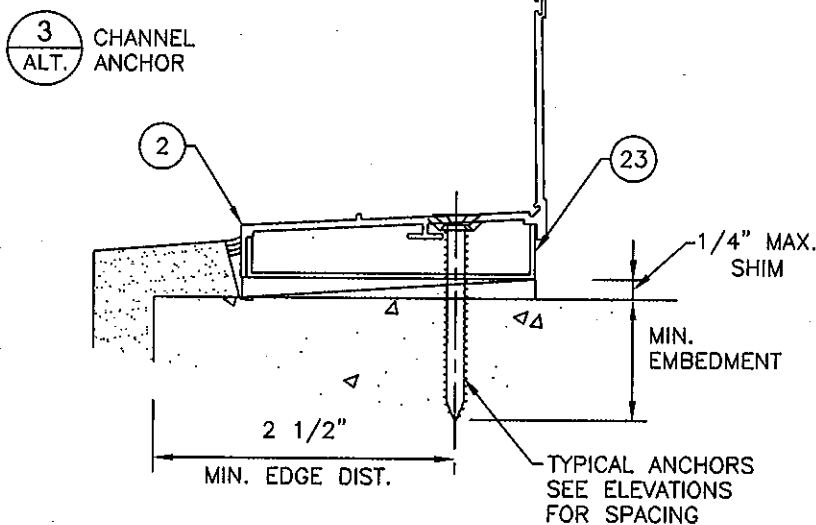
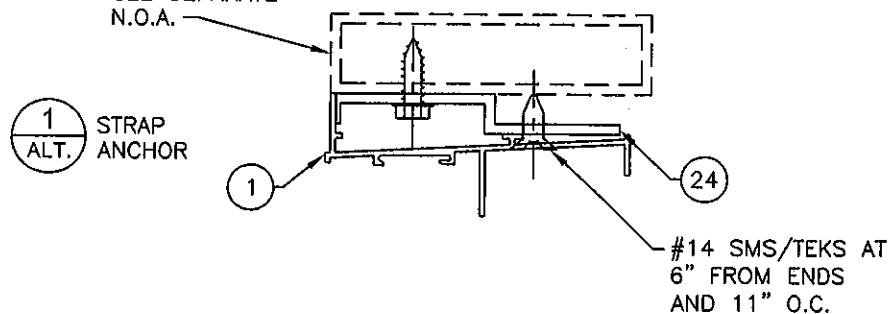
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MIAMI-DADE COUNTY
APP'D. MULLION.
SEE SEPARATE
N.O.A.



MIAMI-DADE COUNTY
APP'D. MULLION.
SEE SEPARATE
N.O.A.



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INSTALLATION DETAILS FOR ALTERNATE CHANNEL AND STRAP ANCHORS

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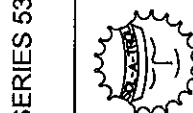
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WINDOW (L.M.I.)

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aluminum products, Inc.
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Miami, Florida 33054
Phone: (305) 681-2020
Fax: (305) 681-2035



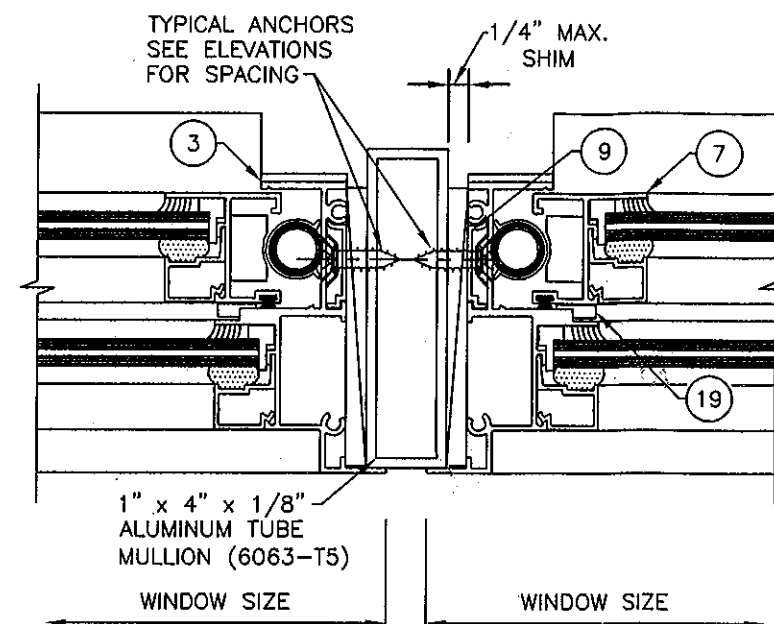
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DATE: 1/30/12
DRAWN BY: DGI
CHECKED BY: C.S.

535SH
DRAWING NO.

SHEET NO.

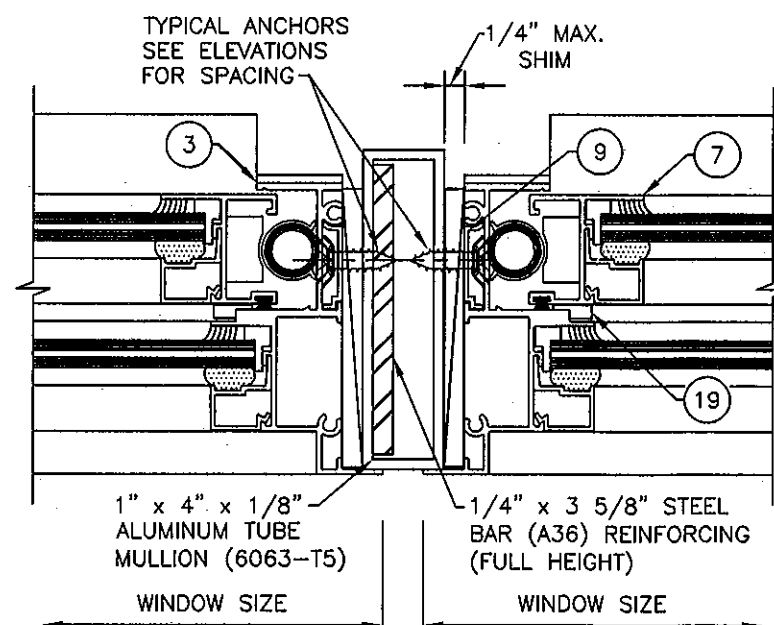
4 of 9

MULLION LOAD CAPACITY - PSF					
WINDOW DIMS.		TYPE '1'		TYPE '2'	
WIDTH (W)	LENGTH (L)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)
26-1/2"	38-3/8"	90.0	100.0	90.0	100.0
32"		90.0	100.0	90.0	100.0
37"		90.0	100.0	90.0	100.0
42"		90.0	100.0	90.0	100.0
48"		90.0	100.0	90.0	100.0
53-1/8"	50-5/8"	90.0	100.0	90.0	100.0
26-1/2"		90.0	100.0	90.0	100.0
32"		90.0	100.0	90.0	100.0
37"		90.0	100.0	90.0	100.0
42"		90.0	100.0	90.0	100.0
48"	60"	90.0	100.0	90.0	100.0
53-1/8"		90.0	100.0	90.0	100.0
26-1/2"		90.0	100.0	90.0	100.0
32"		90.0	100.0	90.0	100.0
37"		90.0	100.0	90.0	100.0
42"	63"	90.0	100.0	90.0	100.0
48"		90.0	100.0	90.0	100.0
53-1/8"		90.0	100.0	90.0	100.0
26-1/2"		90.0	100.0	90.0	100.0
32"		90.0	100.0	90.0	100.0
37"	72"	90.0	100.0	90.0	100.0
42"		90.0	100.0	90.0	100.0
48"		90.0	100.0	90.0	100.0
53-1/8"		90.0	100.0	90.0	100.0
26-1/2"		90.0	100.0	90.0	100.0
32"	76"	90.0	100.0	90.0	100.0
37"		90.0	100.0	90.0	100.0
42"		90.0	100.0	90.0	100.0
48"		90.0	100.0	90.0	100.0
53-1/8"		90.0	100.0	90.0	100.0
26-1/2"	80"	90.0	100.0	90.0	100.0
32"		90.0	100.0	90.0	100.0
37"		90.0	100.0	90.0	100.0
42"		90.0	100.0	90.0	100.0
48"		90.0	95.0	90.0	100.0
53-1/8"		86.0	86.0	90.0	100.0



EXTERIOR
UN-REINFORCED MULLION
TYPE 1

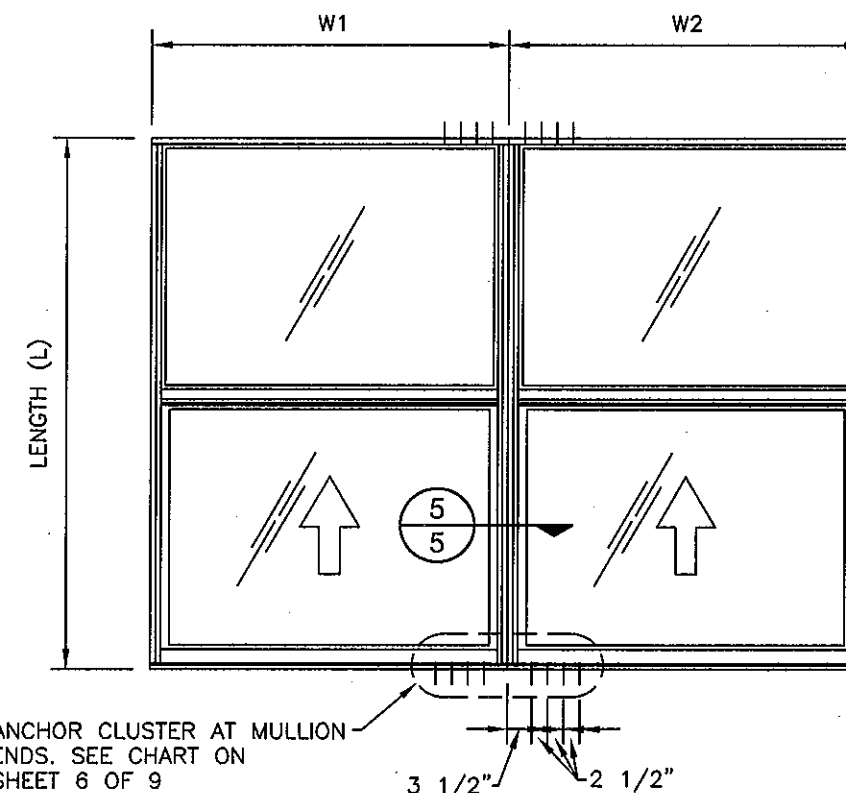
5
5



EXTERIOR
REINFORCED MULLION
TYPE 2

5
5

ALT.



TYPICAL ELEVATION
SIDE BY SIDE WINDOWS
SIDE BY SIDE APPLIES TO 2 OR MORE WINDOWS

ALL OTHER ANCHORS PER
ELEVATION ON SHEET 1 OF 9

$$\text{WIDTH (W)} = \frac{W1 + W2}{2}$$

NOTES:

1. USE CHART ON THIS SHEET FOR SIDE BY SIDE CONNECTION CAPACITY OF WINDOW MULLION.
2. FOR SINGLE WINDOW CAPACITY SEE SHEET 7 OF 9.
3. LOWER VALUES FROM STEPS 1 OR 2 WILL APPLY TO ENTIRE SYSTEM.

MIAMI-DADE COUNTY USE ONLY

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 12-0305.02
Expiration Date March 15, 2017
By *Manuel Perez*
Miami Dade Product Control

SCALE: NOTED
DATE: 1/30/12
DRAWN BY: DGI
CHECKED BY: C.S.

535SH

DRAWING NO.

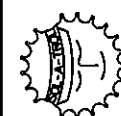
SHEET NO.

5 of 9

STANTON ENGINEERING, INC.
STRUCTURAL ENGINEERING SERVICES
2701 NW BOCA RATON BLVD. SUITE 115
BOCA RATON, FL 33431
TEL: (561) 393-1003 FAX: (561) 393-1008

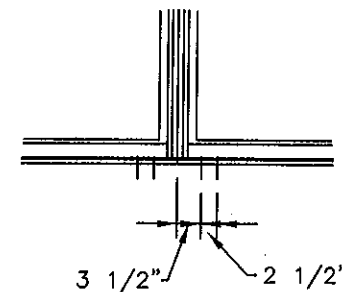
SERIES 535 ALUMINUM SINGLE HUNG
WINDOW (L.M.I.)

SOL-A-TROL
aluminum products, Inc.
4101 N.W. 132nd Street
Miami, Florida 33054
Phone: (305) 681-2020
Fax: (305) 681-2035

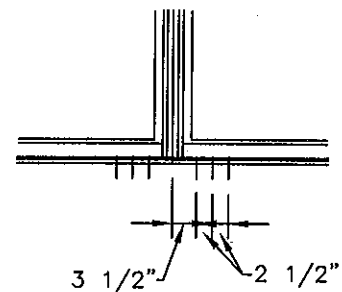


SEAL
JUN 29 2012
CHRISTOPHER STANTON, P.E.
FLA.P.E.# 69318

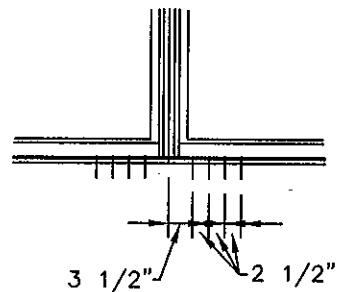
NO.	DATE	REVISIONS
1	5/30/12	PER ADD'L. TESTING / BCCO REVIEW
2	6/27/12	PER BCCO REVIEW
3		
4		
5		



(2) EA. SIDE



(3) EA. SIDE



(4) EA. SIDE

MULLION ANCHOR LOAD CAPACITY - PSF																	
WINDOW DIMS.		ANCHOR TYPE 1				ANCHOR TYPE 2				ANCHOR TYPE 3		ANCHOR TYPE 4		ANCHOR TYPE 5		ANCHOR TYPE 6	
		(2) EA. SIDE		(3) EA. SIDE		(3) EA. SIDE		(4) EA. SIDE		(2) EA. SIDE		(2) EA. SIDE		(2) EA. SIDE		(3) EA. SIDE	
WIDTH (W)	LENGTH (L)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)
26-1/2"	38-3/8"	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0
37"		90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0
40"		90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0
48"		90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0
53-1/8"		90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0
26-1/2"	50-5/8"	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0
37"		90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0
40"		90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0
48"		90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0
53-1/8"		90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0
26-1/2"	60"	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0
37"		90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0
40"		90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0
48"		90.0	96.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0
53-1/8"		86.0	86.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0
26-1/2"	63"	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0
37"		90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0
40"		90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0
48"		90.0	91.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0
53-1/8"		82.0	82.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0
26-1/2"	72"	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0
37"		90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0
40"		90.0	96.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0
48"		80.0	80.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0
53-1/8"		72.0	72.0	90.0	100.0	90.0	94.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0
26-1/2"	76"	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0
37"		90.0	98.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0
40"		90.0	91.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0
48"		75.0	75.0	90.0	100.0	90.0	99.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0
53-1/8"		68.0	68.0	90.0	100.0	89.0	89.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0
26-1/2"	80"	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0
37"		93.0	93.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0
40"		86.0	86.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0
48"		72.0	72.0	90.0	100.0	90.0	94.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	100.0
53-1/8"		65.0	65.0	90.0	97.0	85.0	85.0	90.0	100.0	90.0	100.0	90.0	100.0	90.0	99.0	90.0	97.0

ALL OTHER ANCHORS PER
ELEVATION ON SHEET 1 OF 9

NO.	DATE	REVISIONS
1	5/30/12	PER ADD'L. TESTING / BCCO REVIEW
2	6/27/12	PER BCCO REVIEW
3		
4		
5		

MIAMI-DADE COUNTY USE ONLY
PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 12-0305-02
Expiration Date March 15, 2017
By *Manuel Lopez*
Miami Dade Product Control

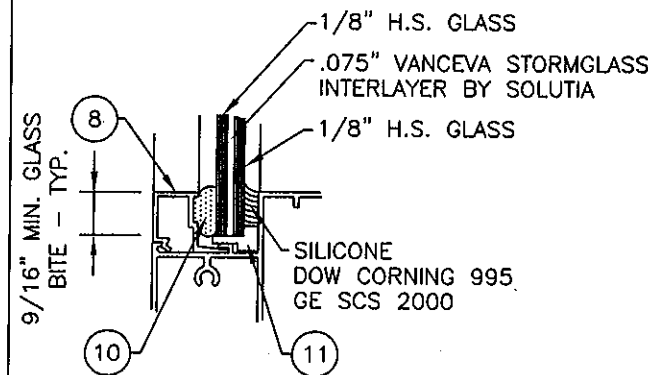
SEALED
JUN 29 2012
CHRISTOPHER STANTON, P.E.
FLA.P.E. # 69316

STANTON ENGINEERING, INC.
STRUCTURAL ENGINEERING SERVICES
2701 NW BOCA RATON BLVD. SUITE 115
BOCA RATON, FL 33431
TEL: (561) 393-1003 FAX: (561) 393-1008

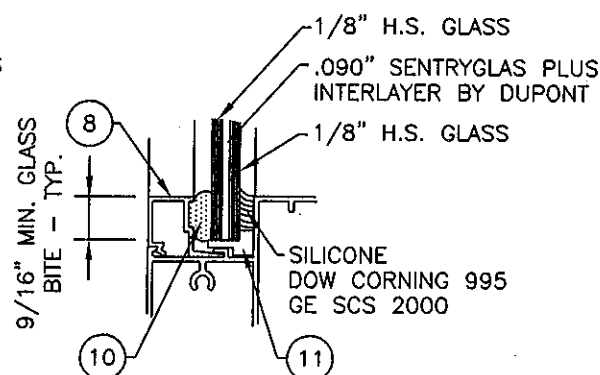
SERIES 535 ALUMINUM SINGLE HUNG
WINDOW (L.M.I.)
SOL-A-TROL
aluminum products, Inc.
4101 N.W. 132nd Street
Miami, Florida 33054
Phone: (305) 681-2020
Fax: (305) 681-2035

SCALE: NOTED
DATE: 1/30/12
DRAWN BY: DGI
CHECKED BY: C.S.

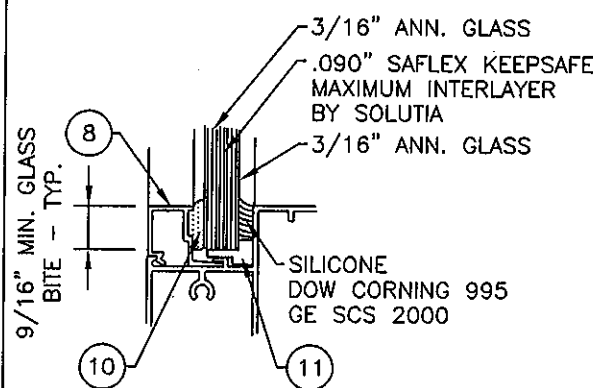
535SH
DRAWING NO.
SHEET NO.
6 of 9



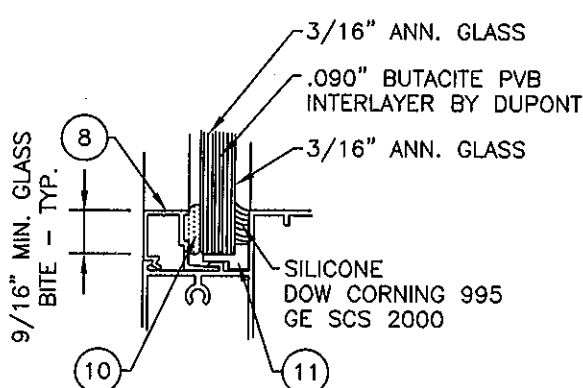
GLASS TYPE 'A'



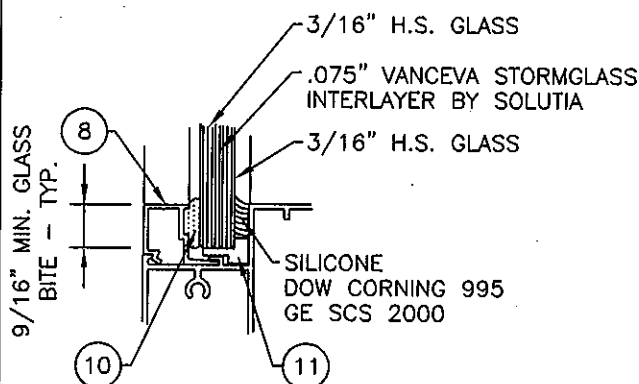
GLASS TYPE 'B'



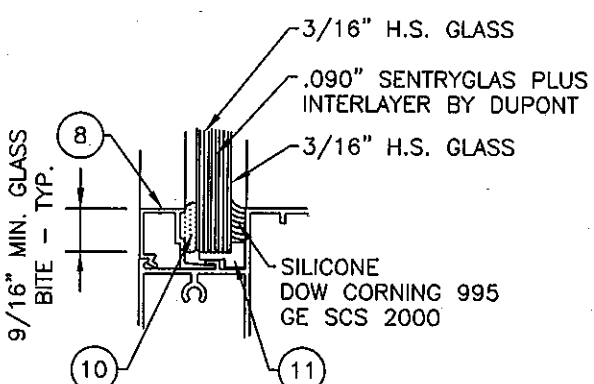
GLASS TYPE 'C'



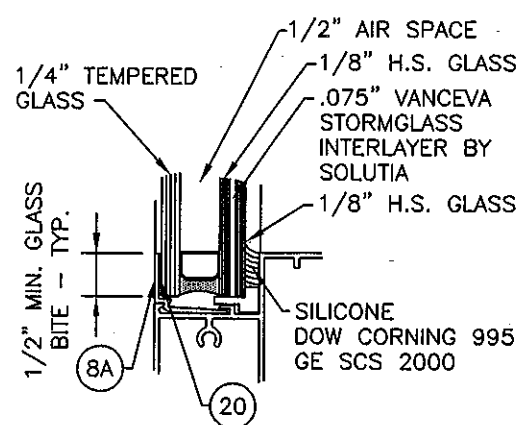
GLASS TYPE 'D'



GLASS TYPE 'E'



GLASS TYPE 'F'



GLASS TYPE 'G'

* PRESSURES SHOWN IN CHART ARE LIMITED BY WATER INFILTRATION RESISTANCE. FOR GLASS TYPES 'A' 'B' 'E' & 'F' ONLY, USE +90.0/-100.0 PSF FOR INSTALLATIONS WHERE WATER INFILTRATION RESISTANCE IS NOT REQD.

(1/1) DESIGN LOAD CAPACITY - PSF							
WINDOW DIMS. (1/1)		GLASS TYPES 'A', 'B' & 'G' *		GLASS TYPES 'C' & 'D'		GLASS TYPES 'E' & 'F' *	
WIDTH	HEIGHT	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)
26-1/2"	38-3/8"	86.7	100.0	80.0	80.0	86.7	100.0
37"		86.7	100.0	80.0	80.0	86.7	100.0
40"		86.7	100.0	80.0	80.0	86.7	100.0
48"		86.7	100.0	80.0	80.0	86.7	100.0
53-1/8"		86.7	100.0	80.0	80.0	86.7	100.0
26-1/2"	50-5/8"	86.7	100.0	80.0	80.0	86.7	100.0
37"		86.7	100.0	80.0	80.0	86.7	100.0
40"		86.7	100.0	80.0	80.0	86.7	100.0
48"		86.7	100.0	80.0	80.0	86.7	100.0
53-1/8"		86.7	100.0	80.0	80.0	86.7	100.0
26-1/2"	60"	86.7	100.0	80.0	80.0	86.7	100.0
37"		86.7	100.0	80.0	80.0	86.7	100.0
40"		86.7	100.0	80.0	80.0	86.7	100.0
48"		86.7	100.0	80.0	80.0	86.7	100.0
53-1/8"		86.7	100.0	80.0	80.0	86.7	100.0
26-1/2"	63"	86.7	100.0	80.0	80.0	86.7	100.0
37"		86.7	100.0	80.0	80.0	86.7	100.0
40"		86.7	100.0	80.0	80.0	86.7	100.0
48"		86.7	100.0	80.0	80.0	86.7	100.0
53-1/8"		86.7	100.0	80.0	80.0	86.7	100.0
26-1/2"	72"	86.7	100.0	80.0	80.0	86.7	100.0
37"		86.7	100.0	80.0	80.0	86.7	100.0
40"		86.7	100.0	80.0	80.0	86.7	100.0
48"		86.7	100.0	80.0	80.0	86.7	100.0
53-1/8"		86.7	100.0	80.0	80.0	86.7	100.0
26-1/2"	76"	86.7	100.0	-	-	86.7	100.0
37"		86.7	100.0	-	-	86.7	100.0
40"		86.7	100.0	-	-	86.7	100.0
48"		86.7	100.0	-	-	86.7	100.0
53-1/8"		86.7	100.0	-	-	86.7	100.0
26-1/2"	80"	86.7	100.0	-	-	86.7	100.0
37"		86.7	100.0	-	-	86.7	100.0
40"		86.7	100.0	-	-	86.7	100.0
48"		86.7	100.0	-	-	86.7	100.0
53-1/8"		86.7	100.0	-	-	86.7	100.0

NOTE: GLASS CAPACITIES ON THIS SHEET ARE BASED ON ASTM E1300-04 (3 SEC. GUSTS)

(FULL VIEW) DESIGN LOAD CAPACITY - PSF			
WINDOW DIMS. (FULL VIEW)		GLASS TYPE "C" & "G"	
WIDTH **	HEIGHT **	EXT.(+)	INT.(-)
UP TO MAX. 42"	UP TO MAX. 102"	70.0	90.0

** MAX. FIXED VENT SIZE DLO = 14.8 SQ. FT.

MIAMI-DADE COUNTY USE ONLY

PRODUCT REVISED as complying with the Florida Building Code
 Acceptance No. 12-0305.02
 Expiration Date March 15, 2017
 By: *Manuel Perez*
 Miami Dade Product Control

NO.	DATE	REVISIONS
1	5/30/12	PER ADD'L. TESTING / BCCO REVIEW
2	6/27/12	PER BCCO REVIEW
3		
4		
5		

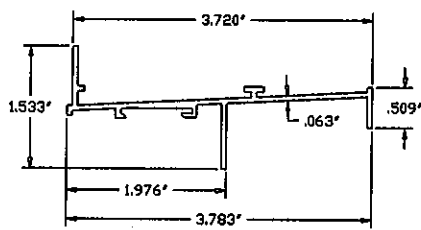
SEAL: *Christopher Stanton, P.E.*
 JUN 29 2012
 CHRISTOPHER STANTON, P.E.
 FLA P.E. #69318

STANTON ENGINEERING, INC.
 STRUCTURAL ENGINEERING SERVICES
 2701 NW BOCA RATON BLVD, SUITE 115
 BOCA RATON, FL 33431
 TEL: (561) 393-1003 FAX: (561) 393-1008

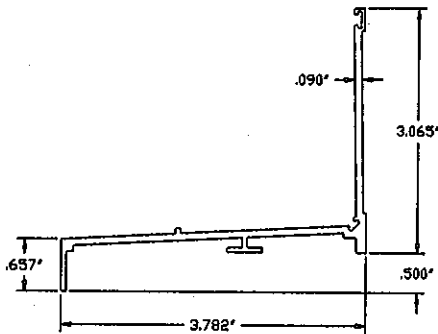
SERIES 535 ALUMINUM SINGLE HUNG WINDOW (L.M.I.)
 SOL-A-TROL
 aluminum products, inc.
 4101 N.W. 132nd Street
 Miami, Florida 33054
 Phone: (305) 681-2020
 Fax: (305) 681-2035

SCALE: NOTED
 DATE: 1/30/12
 DRAWN BY: DGI
 CHECKED BY: C.S.

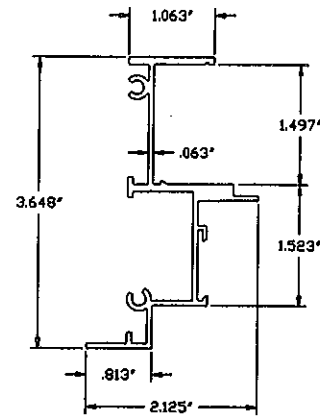
535SH
 DRAWING NO.
 SHEET NO.



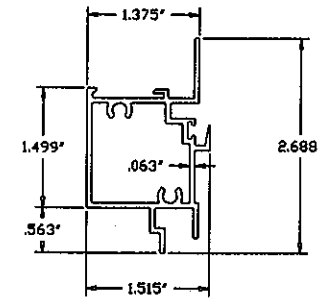
① FRAME HEAD



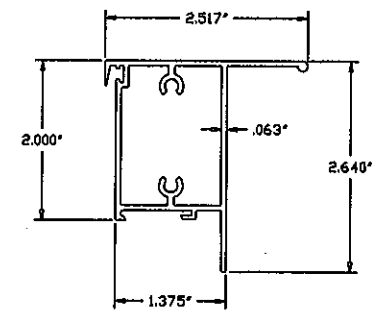
② FRAME SILL



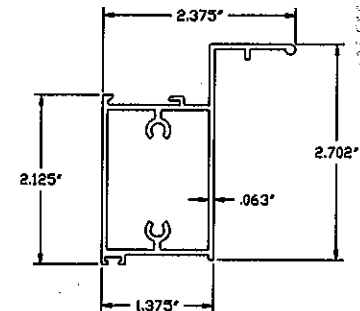
③ FRAME JAMB



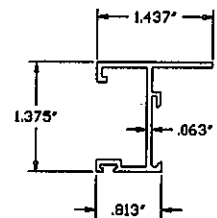
④ FIXED RAIL



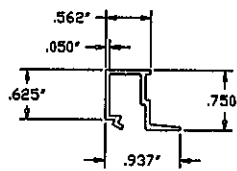
⑤ VENT TOP RAIL



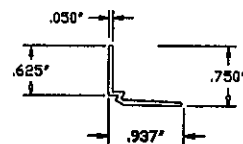
⑥ VENT BOTTOM RAIL



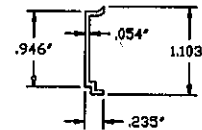
⑦ VENT SIDE RAIL



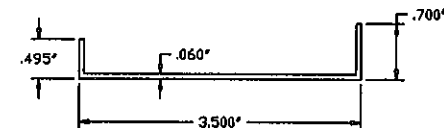
⑧ GLAZING BEAD
MONOLITHIC GLAZING



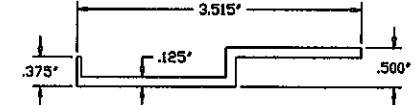
8A GLAZING BEAD
INSULATED GLAZING



⑨ ANCHOR CLIP



⑬ U-CHANNEL



⑭ STRAP ANCHOR

ITEM #	PART #	REQD.	DESCRIPTION	MATERIAL	MANF./SUPPLIER/REMARKS
1	ARSO-954	1	FRAME HEAD	6063-T6	-
2	ARSO-958	1	FRAME SILL	6063-T6	-
3	ARSO-955	2	FRAME JAMB	6063-T6	-
4	ARSO-959	1	FIXED MTG. RAIL	6063-T6	-
5	ARSO-956	1	VENT TOP RAIL	6063-T6	-
6	ARSO-951	1	VENT BOTTOM RAIL	6063-T6	-
7	ARSO-980	2	VENT SIDE RAIL	6063-T5	-
8	ARSO-953	AS REQD.	GLAZING BEAD (MONOLITHIC GLAZING)	6063-T6	-
8A	ARSO-991	AS REQD.	GLAZING BEAD (INSULATED GLAZING)	6063-T6	-
9	-	AS REQD.	ANCHOR CLIP, 2" LONG	6063-T6	-
10	FP-40	AS REQD.	GLAZING WEDGE	VINYL	PROTOTYPE PLASTICS
11	326-FP-8948	AS REQD.	SETTING BLOCK	VINYL	PROTOTYPE PLASTICS
12	00935-18701	AS REQD.	PILE W'STRIPPING	-	POLYPILE
13	326-FP-150S-B	AS REQD.	FLAP W'STRIPPING	VINYL	PROTOTYPE PLASTICS
14	326-FP-216SB	AS REQD.	BULB W'STRIPPING	VINYL	PROTOTYPE PLASTICS
15	326-FP-261AB	AS REQD.	BOTTOM RAIL BULB W'STRIPPING	VINYL	PROTOTYPE PLASTICS
16	LL-50	2/VENT	SPIRAL BALANCE	-	UNIQUE BALANCE
17	FBSS8CFD3	1/ BALANCE	BALANCE HOOK	-	UNIQUE BALANCE
18	-	2	SASH TOP GUIDE	-	M&M PLASTICS
19	FG-200	2	SASH FACE GUIDE	PLASTIC	M&M PLASTICS
20	-	AS REQ'D.	1/8" x 1/2" GLAZING TAPE	PVC	-
21	672205K38	2/VENT	SWEEP LOCK AT 9-7/8" FROM ENDS	ZINC	DECO PRODUCTS, SECURED W/ (2) #8X1" FH SMS
22	#10 X 1"	AS REQD.	FRAME & VENT ASSEMBLY SCREWS	ST. STEEL	PH SMS
23	-	AS REQD.	U-CHANNEL	ALUMINUM	-
24	ARSO-979	AS REQD.	STRAP ANCHOR	6063-T5	-

NO.	DATE	REVISIONS
①	5/30/12	PER ADD'L. TESTING / BCCO REVIEW
②	6/27/12	PER BCCO REVIEW
③		
④		
⑤		

MIAMI-DADE COUNTY USE ONLY
PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 12-0305.02
Expiration Date March 15, 2017
By *Marcus Perez*
Miami Dade Product Control

SCALE: NOTED
DATE: 1/30/12
DRAWN BY: DGI
CHECKED BY: C.S.

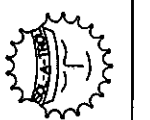
535SH
DRAWING NO.

SHEET NO.

8 of 9

SERIES 535 ALUMINUM SINGLE HUNG
WINDOW (L.M.I.)

SOL-A-TROL
aluminum products, inc.
4101 N.W. 132nd Street
Miami, Florida 33054
Phone: (305) 681-2020
Fax: (305) 681-2035

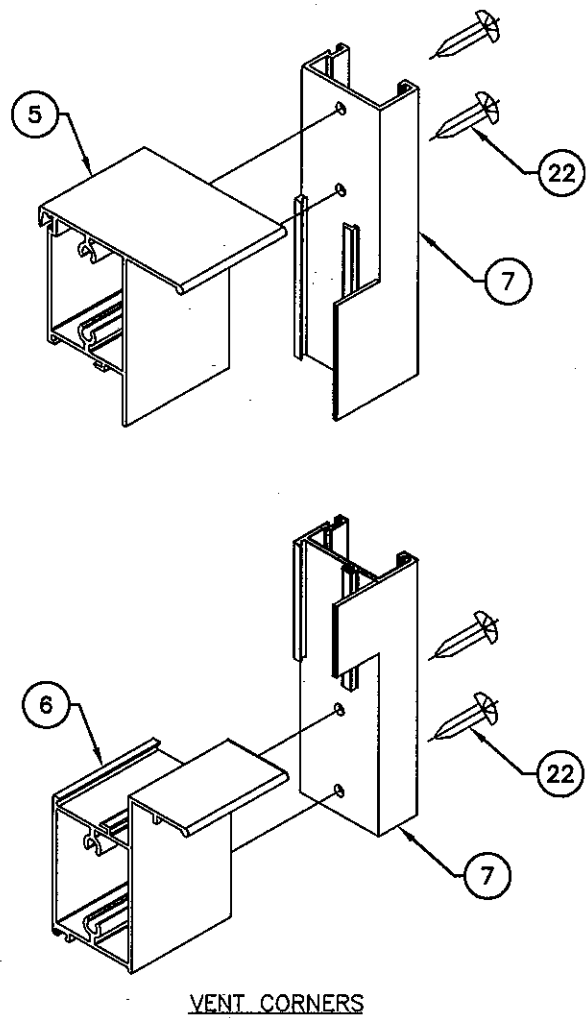
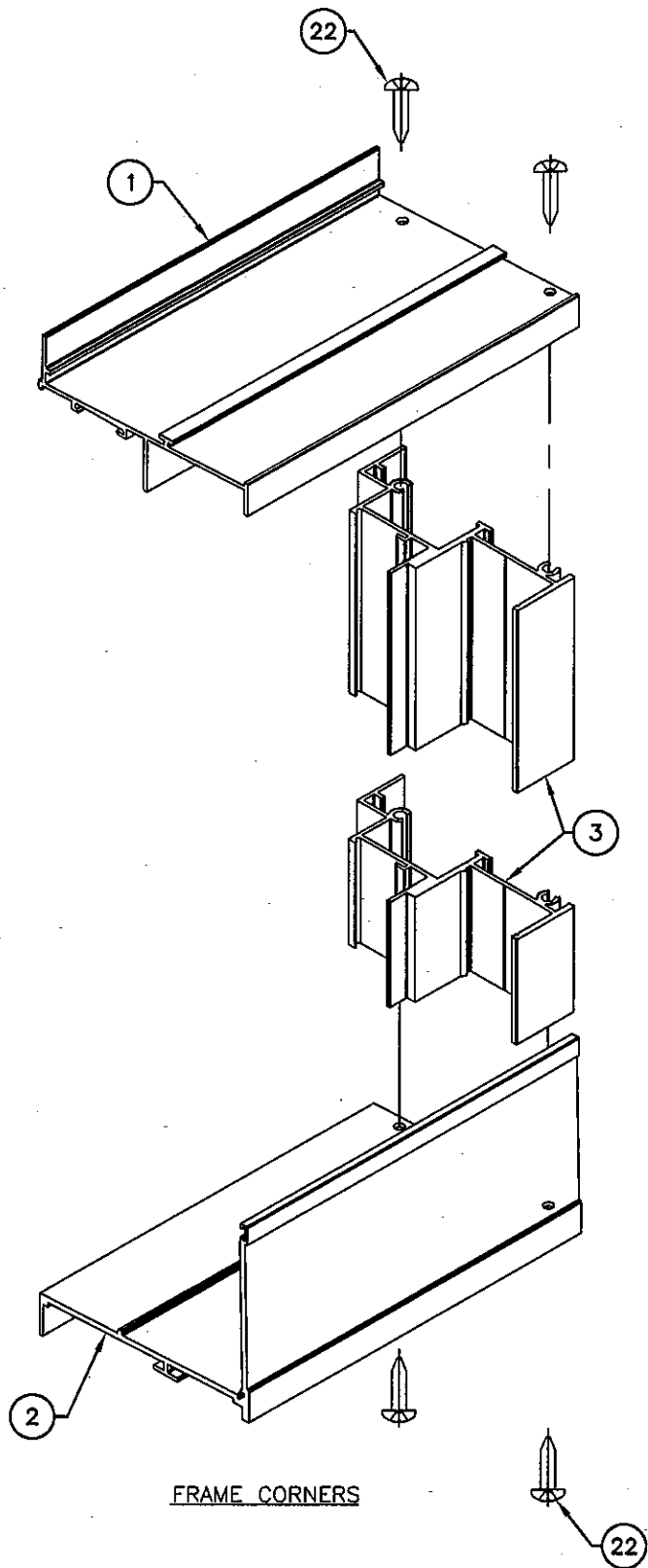
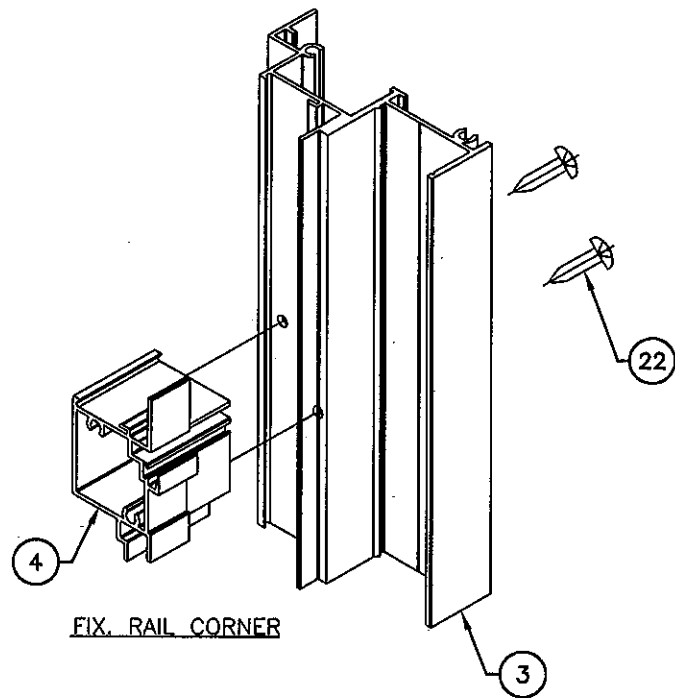


STANTON ENGINEERING, INC.
STRUCTURAL ENGINEERING SERVICES
2701 NW BOCA RATON BLVD. SUITE 115
BOCA RATON, FL 33431
TEL: (561) 393-1003 FAX: (561) 393-1008

CHRISTOPHER STANTON, P.E.
FLA.P.E. # 69316

SEAL
JUN 29 2012
STATE OF FLORIDA

NO.	DATE	REVISIONS
1	5/30/12	PER ADD'L. TESTING / BCCO REVIEW
2	6/27/12	PER BCCO REVIEW
3		
4		
5		



MIAMI-DADE COUNTY USE ONLY

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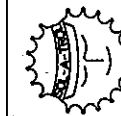
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CHRISTOPHER STANTON, P.E.
FLA P.E. #69316

SEAL
JUN 29 2012